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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,547	01/24/2002	Gilles Klein	218263US6	3327

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ALEXANDRIA, VA 22314

EXAMINER

PITTMAN, ZIDIA T

ART UNIT	PAPER NUMBER
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1725

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DATE MAILED: 03/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/053,547

Applicant(s)

GILLES, KLEIN

Examiner

Zidia Pittman

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 24 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1725

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over King, Jr. et al (USPN 3,893,318) in view of Tomioka et al (USPN 3,945,230).

King, Jr. et al teaches an installation for shaping a part between a lower die and an upper die ("forging apparatus"; see col. 1, l. 49-50), both mobile and contained in a furnace (col. 1, l. 50-57; col. 2, l. 15-24), characterized in that the furnace comprises two superposed parts (see Fig. 2), with an upper part carrying the upper die and a lower part carrying one example of the lower die (Fig. 2; col. 1, l. 49-56), in respective compartments of the furnace, the upper part being mobile relative to the lower part in such a way that the upper die covers the example of the lower die (Fig. 2; col. 1, l. 49-56), and a dividing wall separating the compartments (see Fig. 2).

King, Jr. et al does not teach an installation including a lower part carrying two examples of the lower die and the upper part being mobile relative to the lower part in such a way that the upper die covers the examples of the lower die alternately.

Tomioka et al teaches an apparatus for automatically interchanging die assemblies in a metal working press including a lower part carrying two examples of the lower die and the upper part being mobile relative to the lower part in such a way that the upper die covers the examples of the lower die alternately (col. 4, l. 13-22 and 44-60).

King, Jr. et al and Tomioka et al both disclose apparatus which utilize superposed upper and lower dies. (see King, Jr. et al: see Fig. 2; Tomioka et al: see Fig. 1A)

At the time of the invention, it would have been obvious to one having ordinary skill in the art to modify the teachings of King, Jr. et al with the teachings of Tomioka et al in order that a die change operation in an entire press line or the die changing operation in individual presses can be simultaneously and fully carried out by the unskilled worker and in which the die interchanging operation in a press having a pair of bolsters alternately used in the press can be carried out in parallel to each other thereby permitting the time required for the changing of the die assembly to be extremely shortened and the efficiency of the operation of the press line to be extremely improved.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over King, Jr. et al in view of Tomioka et al as applied to claim 1 above, and further in view of Dumargue et al (USPN 4,601,422).

Art Unit: 1725

King, Jr. et al in view of Tomioka et al teaches all the limitations of claim 2 as recited above for claim 1, including teaching a fixed wall including a lateral boundary and a roof and a lateral boundary (vertically sliding door) connected to the roof of the fixed wall (Fig. 3; col. 2, l. 25-30).

King, Jr. et al in view of Tomioka et al teaches all the limitations of claim 2 as recited above for claim 1, except for teaching a plate, horizontally mobile, carrying the examples of the lower die and a vertically mobile wall, carrying the upper die and comprising the dividing wall plus roof.

Dumargue et al teaches a device for forming and welding material comprising cooperating dies, a plate, horizontally mobile, carrying the examples of the lower die and a vertically mobile wall, carrying the upper die and comprising the dividing wall plus roof (Figs. 2 & 6; col. 4, l. 25-50).

King, Jr. et al in view of Tomioka et al and Dumargue et al disclose apparatus which utilize superposed upper and lower dies. (see King, Jr. et al: see Fig. 2; Tomioka et al: see Fig. 1A; Dumargue et al: abstract)

At the time of the invention, it would have been obvious to one having ordinary skill in the art to modify the teachings of King, Jr. et al in view of Tomioka et al with the teachings of Dumargue et al in order to automate the operations of loading of the blanks onto the lower die and of unloading the formed and welded pieces obtained from the blanks.

Art Unit: 1725

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over King, Jr. et al in view of Tomioka et al as applied to claim 1 above, and further in view of Bergue et al (USPN 5,933,951).

King, Jr. et al in view of Tomioka et al teaches all the limitations of claim 3 as recited above for claim 1, except for teaching hot forming of parts including a cavity submitted to bulging during shaping.

Bergue et al teaches a process for manufacturing a hollow turbomachine blade and a multiple-action furnace press for use including hot forming of parts including a cavity submitted to bulging during shaping (abstract; Fig. 1; col. 3, l. 24-50).

King, Jr. et al in view of Tomioka et al and Bergue et al disclose apparatus which utilize superposed upper and lower dies. (see King, Jr. et al: see Fig. 2; Tomioka et al: see Fig. 1A; Bergue et al: abstract)

At the time of the invention, it would have been obvious to one having ordinary skill in the art to modify the teachings of King, Jr. et al in view of Tomioka et al with the teachings of Bergue et al in order to carry out hot forming operations as a known process utilized with a pressing means.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Terziakin (USPN 6,463,779), Muller (USPN 6,446,478), Bergue et al (USPN 6,210,630), To (USPN 6,000,322), Calle et al (USPN 5,946,802), Calle et al (USPN 5,896,658), Yang et al (USPN 6,015,512), Shuert (USPN 5,843,366), Bichon et al

Art Unit: 1725

(USPN 5,826,332), Carter (USPN 5,567,381), Alasoeur et al (USPN 5,544,805), Jenista (USPN 5,325,694), Wilks (USPN 5,027,635), and Dunn (USPN 4,720,615) are cited as of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zidia Pittman whose telephone number is (703) 305-1248. The examiner can normally be reached on Monday – Thursday and alternate Fridays from 8:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn, can be reached at (703) 308-3318. The official fax phone number for the organization where this application or proceeding is assigned is (703) 305-7718. The unofficial fax number for art unit 1725 is (703) 305-6078.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

TD

3/10/03

Tom Dunn

TOM DUNN
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